AMENDMENTS

In the Claims kindly revise them to read as follows:

1. (~~allowed~~ original) A mapping catheter for use in mapping cardiac electrical potentials of a patient's heart comprising:

a) a set of electrodes;

b) first positioning means having a maximum diameter that defines the maximum diameter for said catheter, coupled to said set of electrodes for spacing a portion of said set of electrodes, defined as a first subset of electrodes, apart from and not in contact with a surface of said patient's heart, at least one of said subset of electrodes being located proximate said maximum diameter and at least one of said subset being located at a location away from said maximum diameter; and

c) second positioning means coupled to said set of electrodes for placing a second predetermined subset of said set of electrodes into contact with a surface of said patient's heart, said second predetermined subset being different from said first subset.

2. (~~allowed~~ original) The apparatus of claim 1 wherein said set of electrodes comprises at least twenty-four electrodes.

3. (~~allowed~~ original) A catheter assembly for mapping the interior of a patient's heart comprising:

a) a first set of electrode sites defining a first electrode array, at least one of said first set of electrodes being located near the maximal diameter of catheter assembly and at least one of said first set of electrodes being located apart from said maximal diameter;

b) said electrode array adapted to be positioned within said patient's heart with a substantial number of said electrodes not in contact with said heart; and

c) a second set of electrode sites adapted to be located in contact with said patient's heart, said second set of electrode sites being different from said first set of electrode sites.

4. (~~allowed~~) The catheter assembly of claim 1 wherein said first and second positioning means can be moved with respect to one another.

5. (~~allowed~~) The catheter assembly of claim 1 wherein said first and second positioning means are fixed with respect to one another.

6. (currently amended) A catheter assembly for mapping the interior of a patient's heart comprising:

a) a first subcatheter having a maximal diameter location and a minimal diameter location, and a first set of electrode sites defining a first electrode array,

at least one electrode site being located near the maximal diameter of said catheter assembly;

at least one of said first set of electrodes being located apart from and not in contact with a surface of said patient's heart,

at least one electrode site being located near the minimum diameter of said catheter assembly;

b) said electrode array adapted to be positioned within said patient's heart with a substantial number of said electrodes not in contact with said heart;

c) a second set of electrode sites formed on a second subcatheter, at least one electrode site adapted to be located in contact with said patient's heart tissue,

said second subcatheter, having a proximal end and a distal end, which can be manipulated independently of said first subcatheter by moving [manipulating]said proximal end of said second subcatheter.

7. (previously presented) The catheter assembly of claim 6 wherein said first subcatheter has a central lumen for receiving said second subcatheter.

8. (previously presented) The catheter's assembly of claim 7 wherein said first subcatheter and said second subcatheter are coaxial with respect to one another.

9. (currently amended) The catheter assembly of claim 8 wherein said second subcatheter extends distally of the distal tip of said first subcatheter.